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DATE MAILED: 09/22/2006

| APPLICATION NO.       | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------------|----------------------|----------------------|-------------------------|------------------|
| 10/625,340            | 07/22/2003           | Gerald K. Hein       |                         | 8601             |
| 7590 . 09/22/2006     |                      |                      | EXAMINER                |                  |
| David M. Mundi, Esq.  |                      |                      | CIRIC, LJILJANA (LIL) V |                  |
| Cook Alex McF         | arren Menzo Cummings | & Mehler, Ltd.       | <del></del>             |                  |
| Suite 2850            |                      |                      | ART UNIT                | PAPER NUMBER     |
| 200 West Adams Street |                      |                      | 3753                    |                  |
| Chicago, IL 60        | 0606                 | •                    |                         |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

|  | Application No.   | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|
| Office Asticus Commons   | 10/625,340  | HEIN, GERALD K.  |  |  |  |
| Office Action Summary  | Examiner / 1//  | Art Unit   |  |  |  |
|  | Ljiljana (Lil) V. Ciric   | 3753   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 21 Au   | igust 2006.   |  |  |  |  |
| ·- ·   | action is non-final.  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45  | 53 O.G. 213.   |  |  |  |
| Disposition of Claims  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-14 and 21</u> is/are pending in the application.   |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |
| 6) Claim(s) is/are rejected.   |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |
| 8)⊠ Claim(s) <u>1-14 and 21</u> are subject to restriction   | and/or election requirement.  | ·  |  |  |  |
| Application Papers   |   |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correct   | ion is required if the drawing(s) is ob   | jected to. See 37 CFR 1.121(d).  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |
| application from the International Bureau  |   | ad   |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |
|  | *   |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date   |   |  |  |  |  |
| Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date  | 6) Other:   | ацент Арріксаціон  |  |  |  |

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## Response to Amendment

- 1. This Office action is in response to the reply filed on August 21, 2006.
- 2. The amendment filed with the above response is being entered.
- 3. Claims 1 through 14 and 21 are pending.
- 4. Upon reconsideration in view of the entire file wrapper history of the instant application and the scope of the prior art, the finality of the previous Office action on the merits is hereby withdrawn. The previously indicated allowability of claims 1 through 14 is hereby also being withdrawn. An election/restriction requirement follows.

## Election/Restrictions

- 5. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1 through 14, drawn to a system (including heat sink details) for removing heatfrom a semiconductor integrated circuit, classified in class 361, subclass 710.
  - II. Claim 21, drawn to a method of cooling a semiconductor integrated circuit using a heat sink, classified in class 361, subclass 709.
- 6. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice a process, which unlike the process that is Invention II as claimed, necessarily includes a step of maintaining the heat sink member in direct engagement with both the integrated circuit board assembly and the mounting member and which also includes a step whereby the heat sink is received by the attachment member. Also, the process as claimed can be practiced using an apparatus, which unlike the

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apparatus that is Invention I as claimed, includes an attachment member which is not necessarily positioned on the mounting member.

- 7. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 8. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
- 9. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and(ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner, who is on

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a flexible schedule, can normally be reached on most business days between the hours of 10:00 am and 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on 571-272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ljiljana (Lil) V. Cirio Primary Examiner Art Unit 3753

lvc